water environment federation

What is Non-point Source Pollution?

Non-point source pollution closes beaches, kills wildlife, poisons drinking water resources, destroys fish and shellfish habitat, and causes dangerous algal blooms. In most cases, this pollution comes from various land use practices, air pollutants, and sewer overflows -- plus daily activities of people like you.

Unlike specific points such as some factory discharge pipes, non-point source pollution comes from many different spots. And it's harder to control non-point sources of pollution, which include excess farm and lawn nutrients that move throughout the soil into the groundwater or enter local waters directly through runoff during heavy rains; uncontrolled stormwater runoff from construction sites; forestry operations; animal wastes; and even pollutants released directly into the atmosphere. From farmlands to suburban lawns, people use the land in ways that cause nonpoint source pollution.

What Are the Pollutants?

Non-point source pollutants include nutrients, such as nitrogen and phosphorus from fertilizers and septic tank systems, sediments from construction and timber harvest sites, pesticides from agricultural lands, salts from winter road treatment, and trace metals and toxic chemicals from inadequately protected landfills. Individually, these pollutants may not be a major concern, but taken as a whole they can result in widespread water quality problems that must be addressed.

The Solution Begins With Us

Pollution prevention is essential to reducing non-point source pollution. Examples of pollution prevention include detention ponds for capturing sediments in stormwater runoff, and buffer strips of vegetation to separate farmed or urban lands from nearby waters.

Steps to reduce non-point source pollution:

- Use pesticides and herbicides sparingly on lawns and gardens, and only after considering more natural methods of control.
- Protect shrubs, vines, and other plants that grow along shorelines.
- Seed or mulch areas where soil can wash away.
- Keep toxins such as engine oils, paint thinners, and pesticides out of sewers, septic tanks, and stormwater drains -- use carefully and dispose of them safely (at a household hazardous waste collection site if available in your area).
- Control fertilizer use on lawns and gardens.
- Take public transportation, ride in a carpool, and limit driving when possible to reduce air emissions and oil and gasoline runoff, especially from gas service stations. (Proper car maintenance also helps).
- When changing your car's oil, make sure used oil is collected and not disposed on ground.